

Amendment to the Claims

1. (currently amended) A geophone, comprising:
  - a housing;
  - a first terminal positioned on one end of the housing;
  - an electrically conductive path formed from a plurality of conductive parts having a first end coupled to the first terminal;
  - a first coil resiliently mounted within the housing and coupled to the first end of the electrically conductive path;
  - a second terminal positioned on a second end of the housing;
  - a second end of the electrically conductive path coupled to the second terminal;
  - a second coil resiliently mounted within the housing and coupled to the second end of the electrically conductive path; [and]
  - a magnet mounted within the housing; and
  - an electrically insulating deposit on a surface of the plurality of conductive parts electrically insulating the pathway from the housing.
2. (original) The geophone of claim 1, wherein the magnet and the electrically conductive path are electrically insulated from each other.
3. (original) The geophone of claim 1, wherein the housing, the magnet, and the electrically conductive path are electrically insulated from each other.

4. (original)The geophone of claim 1, wherein the first end of the conductive path comprises:
  - a first end plate support;
  - a first spring; and
  - a first coil support.
5. (original)The geophone of claim 1, wherein the second end of the conductive path comprises:
  - a second end plate support;
  - a second spring; and
  - a second coil support.
6. (original)The geophone of claim 4, wherein the second end of the conductive path comprises:
  - a second end plate support;
  - a second spring; and
  - a second coil support.
7. (original)The geophone of claim 1, further comprising:
  - a first magnet support coupled to the housing and the magnet; and
  - a second magnet support coupled to the housing and the magnet.
8. (original)The geophone of claim 1, wherein at least a portion of the surface of the magnet is electrically non-conductive.

9. (original)The geophone of claim 7, wherein at least a portion of the surface of at least one of the magnet, the first magnet support and the second magnet support is electrically non-conductive.

10. (original)The geophone of claim 1, wherein one or more electrically conductive elements include insulative surfaces for insulating the one or more electrically conductive elements from one or more other electrically conductive elements.

11. (currently amended)A geophone, comprising:

a housing including a first end and a second end opposite the first end;

a first end plate coupled to the first end of the housing;

a second end plate coupled to the second end of the housing;

a first end plate support coupled to the first end plate;

a second end plate support coupled to the second end plate;

a first magnet support coupled to the first end plate support;

a second magnet support coupled to the second end plate support;

a magnet coupled to the first and second magnet supports;

a first resilient ring coupled to the first end plate support;

a second resilient ring coupled to the second end plate support;

a first spring coupled to the first end plate support;

a second spring coupled to the second end plate support;

a first coil support coupled to the first spring;

a second coil support coupled to the second spring;

a first coil coupled to the first coil support; and

a second coil coupled to the second coil support, wherein

the first end plate support, first resilient ring, first spring, first coil support and first coil are electrically coupled to form a conductive path to the first end, the conductive path being insulated from other conductive parts by an insulating coating deposited on a surface of parts forming the conductive path or on a surface of the other conductive parts.

12. (original)The geophone of claim 11, further comprising:

a first retaining ring for coupling the first coil support to the first spring; and

a second retaining ring for coupling the second coil support to the second spring.

13. (original)The geophone of claim 11, wherein at least a portion of the surface of at least one of the first end plate, the second end plate, the magnet, the first magnet support, the second magnet support, first coil support, and second coil support is electrically non-conductive

14. (original)The geophone of claim 13, wherein the non-conductive surface is selected from a group consisting of (i) nonconductive paint, (ii) nonconductive adhesive, (iii) an enamel layer, (iv) an oxidized layer, and (v) an anodized layer, affixed to the surface of the portion.

15. (original)The geophone of claim 11, wherein at least a portion of the surfaces of the first and second end plate supports are electrically conductive.

16. (original) The geophone of claim 11, wherein at least a portion of the surfaces of the first and second end plate supports are resistant to oxidation.

Claim 17. (canceled)

Claim 18. (canceled)

19. (currently amended) ~~The method of claim 18~~ A method of electrically insulating a first electrically conductive component from at least one second electrically conductive component within a geophone, comprising:

treating a surface of at least one of the first and second components to render at least a portion of the treated surface electrically non-conductive, wherein the treatment comprises disposing at least one of (i) nonconductive paint, (ii) nonconductive adhesive, (iii) an enamel layer, (iv) an oxidized layer, and (v) an anodized layer, on the surface.

20. (currently amended) A seismic acquisition system, comprising:

at least one geophone, each geophone comprising:

a housing;

a first electrically conductive terminal on one end of the housing;

a first coil resiliently mounted within the housing and operably coupled to the first terminal  
through a first plurality of conductive parts coupled to form a first conductive pathway, wherein the

first conductive pathway is electrically insulated from the housing by a deposit of insulating material deposited on one of the housing and the first plurality of conductive parts;

a second electrically conductive terminal on a second end of the housing;

a second coil resiliently mounted within the housing and operably coupled to the second terminal through a second plurality of conductive parts coupled to form a first conductive pathway, wherein the second conductive pathway is electrically insulated from the housing by a deposit of insulating material deposited on one of the housing and the second plurality of conductive parts;

a magnet mounted within the housing; and

a controller operably coupled to the geophone.

21. (original)The system of claim 20, wherein the magnet, the first terminal, and the second terminal are electrically insulated from each other.

22. (original)The system of claim 20, wherein the housing, the magnet, the first terminal, and the second terminal are electrically insulated from each other.

23. (original)The system of claim 20, wherein the first terminal comprises:  
a first end plate support;  
a first spring; and  
a first coil support.

24. (original)The system of claim 20, wherein the second terminal comprises:

a second end plate support;

a second spring; and

a second coil support.

25. (original)The system of claim 23, wherein the second terminal comprises:

a second end plate support;

a second spring; and

a second coil support.

26. (original)The system of claim 20, further comprising:

a first magnet support coupled to the housing and the magnet; and

a second magnet support coupled to the housing and the magnet.

27. (original)The system of claim 20, wherein at least a portion of the surface of the magnet is electrically non-conductive.

28. (original)The system of claim 26, wherein at least a portion of the surface of at least one of the magnet, the first magnet support and the second magnet support is electrically non-conductive.

Claim 29. (canceled)

30. (currently amended) The system of claim 20, wherein the insulating material includes ~~first terminal and the second terminal are electrically insulated from one or more of the elements of the geophone by an insulating layer disposed on the surface of at least one of the elements, the layer comprising at least one of the or more of (i) nonconductive paint, (ii) nonconductive adhesive, (iii) an enamel layer, (iv) an oxidized layer, and (v) an anodized layer.~~  
surfaces.

Claims 31 - 43 (canceled)

44. (previously presented) A geophone having a plurality of first electrically conductive parts and a plurality of second electrically conductive parts, the first plurality of parts being interconnected to form an electrically conductive pathway, the electrically conductive pathway being insulated from the second plurality of parts by an electrically insulating layer disposed on a surface of one of the electrically conductive pathway and the second plurality of parts.

45. (original)The geophone of claim 44, wherein the electrically insulating layer is selected from a group consisting of (i) nonconductive paint, (ii) nonconductive adhesive, (iii) an enamel layer, (iv) an oxidized layer, and (v) an anodized layer, the insulating layer being disposed on one or more of the first plurality of parts and second plurality of parts.

Claims 46-47. (canceled)